

KENWOOD

Listen to the Future



TK-7160(H)/8160(H)

Compact VHF/UHF FM Mobile Radios



FleetSync®
by KENWOOD

GENERAL FEATURES

- 25 / 50 W (136-174 MHz) Models
- 25 / 45 W (450-490 MHz) Models
- Conventional Zones
- 128 Channels / 128 Zones
- Single Priority Scan
- Single / Multi-Zone Scan
- 8-Character Alphanumeric Aliases
- Backlit LCD & Keys
- Function/Status LCD Icons
- Transmit /Busy / Call Alert LED
- 9 Programmable Function Keys
- Emergency / AUX Key
- Enhanced Kenwood Audio
- Front Panel Speaker
- Companded Audio
- Voice Inversion Scrambler Built-in
- Encryption / ANI Board Control

- Emergency Call Features
- QT / DQT
- Operator Selectable Tone
- Two-Tone Decode
- Single & Two-Tone Encode
- DTMF Encode / Decode¹
- Special Alert Tone Patterns²
- Call Key²
- Busy Channel Lockout
- Time Out Timer
- Timed Power Off
- Accessory Interface Cable Option⁴
- 8 Programmable I/O Ports⁴
- Ignition Sense⁵
- Public Address / Horn Alert Option⁶
- MIL-Spec Standard Mic
- MIL-Spec 12-Key DTMF Mic Option

- Windows® Programming & Tuning⁷
- Front Panel Field-Program Mode
- Cloning
- MIL-STD-810 C/D/E/F

FleetSync®

- PTT ID Digital ANI
- Selective Call & Group Call
- Status Messaging
- Emergency Status
- Caller ID Display
- Input / Output Status Messages
- FleetSync® GPS Ready⁸
- Send GPS PF Key
- PTT ID & Emergency GPS Reporting⁸
- Ignition On/Off GPS Reporting^{5,8}



Options



All accessories and options may not be available in all markets. Contact an authorized Kenwood dealer for details and complete list of all accessories and options.

Specifications

| Model | TK-7160 | TK-7160H | TK-8160 | TK-8160H | Model | TK-7160 | TK-7160H | TK-8160 | TK-8160H |
|--|--|-------------------|-------------|---------------|----------------------------|--------------|-----------------------------------|---------|----------|
| GENERAL | | | | | | | | | |
| | | | | | | | | | |
| Frequency Range | 136~174 MHz | | 450~490 MHz | | Sensitivity (12dB SINAD) | | | | |
| Number of Channels | | | | | Wide | 0.28 μ V | | | |
| Zone | | Max.128 per Radio | | | Narrow | 0.35 μ V | | | |
| Channel | | Max.128 per Zone | | | Selectivity | | | | |
| Channel Spacing | | | | | Wide | 75 dB | | | |
| Wide | 25 kHz, 30 kHz | | 25 kHz | | Narrow | 65 dB | | | |
| Narrow | 12.5 kHz, 15 kHz | | 12.5 kHz | | Intermodulation Distortion | | | | |
| Operating Voltage | 13.6 V DC \pm 15 % | | | | Wide | 70 dB | | | |
| Current Drain | | | | | Narrow | 60 dB | | | |
| Standby | 0.4 A | 0.4 A | 0.4 A | 0.4 A | Spurious Response | 75 dB | | | |
| Receive | 1.0 A | 1.0 A | 1.0 A | 1.0 A | Audio Output | | 4 W with less than 5 % distortion | | |
| Transmit | 8.0 A | 14.0 A | 8.0 A | 14.0 A | (4 Ω Impedance) | | | | |
| Duty Cycle | | Transmit: 20 % | | | | | | | |
| Operating Temperature Range | -22 °F ~ +140 °F (-30 °C ~ +60 °C) | | | | | | | | |
| Frequency Stability | ± 0.00025 % | -22 °F ~ +140 °F | | | | | | | |
| Antenna Impedance | | 50 Ω | | | | | | | |
| Channel Frequency Spread | 38 MHz | | 40 MHz | | | | | | |
| Dimensions (W x H x D), Projections not included | 6-5/16" x 1-11/16" x 5-3/8" (160 mm x 43 mm x 137 mm) | | | | | | | | |
| Weight (net) | 2.6 lbs. (1.18 kg) | | | | | | | | |
| FCC ID | K4437663110 | K4437663210 | K4437673110 | K4437673210 | | | | | |
| IC Certification | — | 282F-37663210 | — | 282F-37673210 | | | | | |

* FleetSync® is not compatible with FleetSync® II offered in some Kenwood products.

** The 20-pin 160-Series Easy Option Port is not compatible with the Kenwood 26-pin Easy Option Port connector/options.

The traditional PCB connectors are available for wired-in boards not having a 20-pin Easy Option Port connector.

FleetSync® is a registered trademark of Kenwood Corporation.

Windows® is a registered trademark of Microsoft Corporation in the United States and other countries.

All other trademarks are property of their respective owners.

Applicable MIL-STD

| Standard | MIL 810C Methods/Procedures | MIL 810D Methods/Procedures | MIL 810E Methods/Procedures | MIL 810F Methods/Procedures |
|-------------------|-------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Low Pressure | 500.1/Procedure I | 500.2/Procedure I, II | 500.3/Procedure I, II | 500.4/Procedure I, II |
| High Temperature | 501.1/Procedure I, II | 501.2/Procedure I, II | 501.3/Procedure I, II | 501.4/Procedure I, II |
| Low Temperature | 502.1/Procedure I | 502.2/Procedure I, II | 502.3/Procedure I, II | 502.4/Procedure I, II |
| Temperature Shock | 503.1/Procedure I | 503.2/Procedure I | 503.3/Procedure I | 503.4/Procedure I, II |
| Solar Radiation | 505.1/Procedure I | 505.2/Procedure I | 505.3/Procedure I | 505.4/Procedure I |
| Rain* | 506.1/Procedure II | 506.2/Procedure II | 506.3/Procedure II | 506.4/Procedure III |
| Humidity | 507.1/Procedure I, II | 507.2/Procedure II, III | 507.3/Procedure II, III | 507.4 |
| Salt Fog | 509.1/Procedure I | 509.2/Procedure I | 509.3/Procedure I | 509.4 |
| Dust | 510.1/Procedure I | 510.2/Procedure I | 510.3/Procedure I | 510.4/Procedure I, III |
| Vibration | 514.2/Procedure VIII, X | 514.3/Procedure I | 514.4/Procedure I | 514.5/Procedure I |
| Shock | 516.2/Procedure I, II, III, V | 516.3/Procedure I, IV, V | 516.4/Procedure I, IV, V | 516.5/Procedure I, IV, V |

* MILSTD-810 506.X Procedure II "rain drip" specifications are conditional on installed KMC-35/36 microphones and supplied accessory connector covers.

footnotes from front:

¹ DTMF includes PTT ID, Emergency ANI, Manual Encode (KMC-36), Auto-Dial (9 numbers) & Stun.

² Special Alert Tone Patterns operate for 2-Tone, DTMF, FleetSync® selective call decode.

³ KCT-39 required for 4 CH remote control, ignition sense (KCT-18), KGP-2A/B, KDS-100, data modems, external GPS interface.

⁴ KCT-39 & KCT-18 ignition sense cable options required.

⁵ KAP-2 required: Horn Alert operates for FleetSync®, 2-Tone or DTMF selective call decode.

⁶ KPG-99D program software required: Windows®/NT/2000/Me/XP compatible; English/Spanish program screen languages.

⁷ FleetSync® GPS features require a KCT-39 and an external GPS receiver with NMEA TTL level serial data output; set Port 1 & 2 (Inputs) to "GPS NMEA."

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ADVANCED
WIRELESS
COMMUNICATIONS